



STATE OF MARYLAND

DHMH

Maryland Department of Health and Mental Hygiene  
201 W. Preston Street • Baltimore, Maryland 21201

Martin O'Malley, Governor – Anthony G. Brown, Lt. Governor – Joshua M. Sharfstein, M.D., Secretary

March 14, 2014

## Public Health & Emergency Preparedness Bulletin: # 2014:10 Reporting for the week ending 03/08/14 (MMWR Week #10)

### CURRENT HOMELAND SECURITY THREAT LEVELS

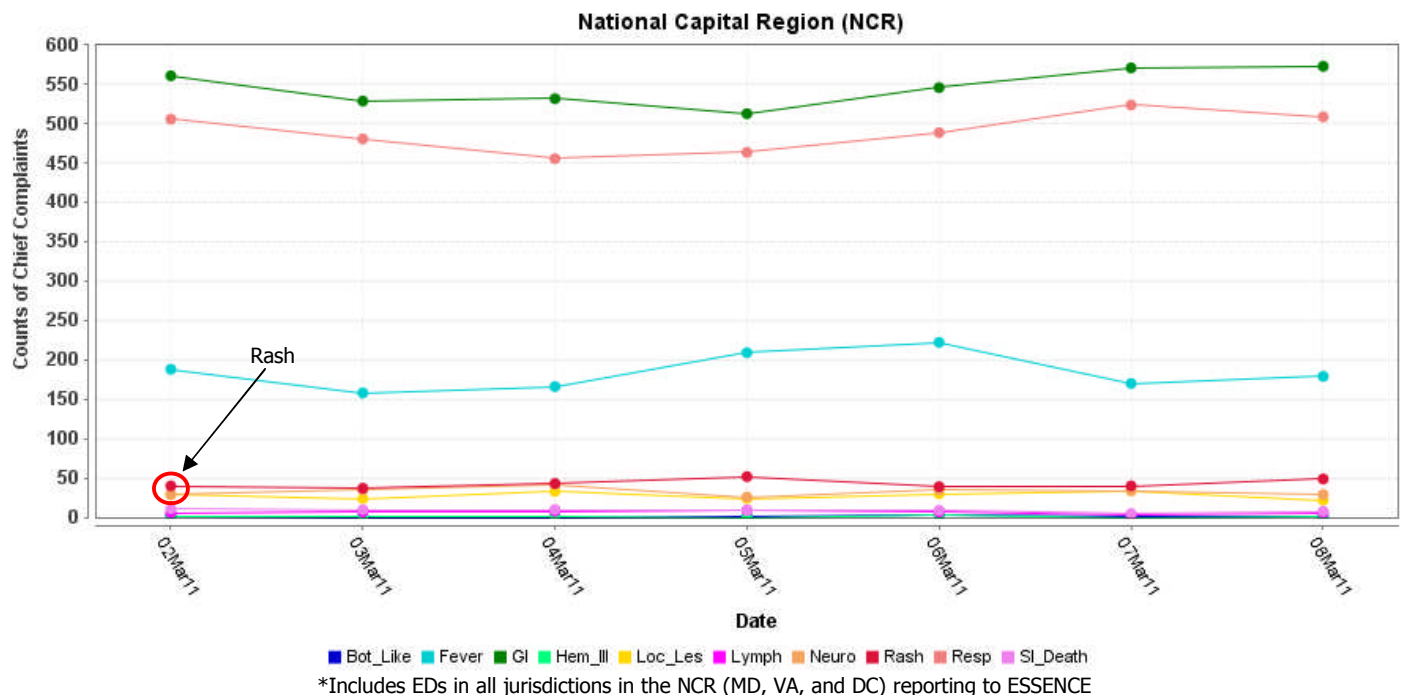
National: No Active Alerts  
Maryland: Level Four (MEMA status)

### SYNDROMIC SURVEILLANCE REPORTS

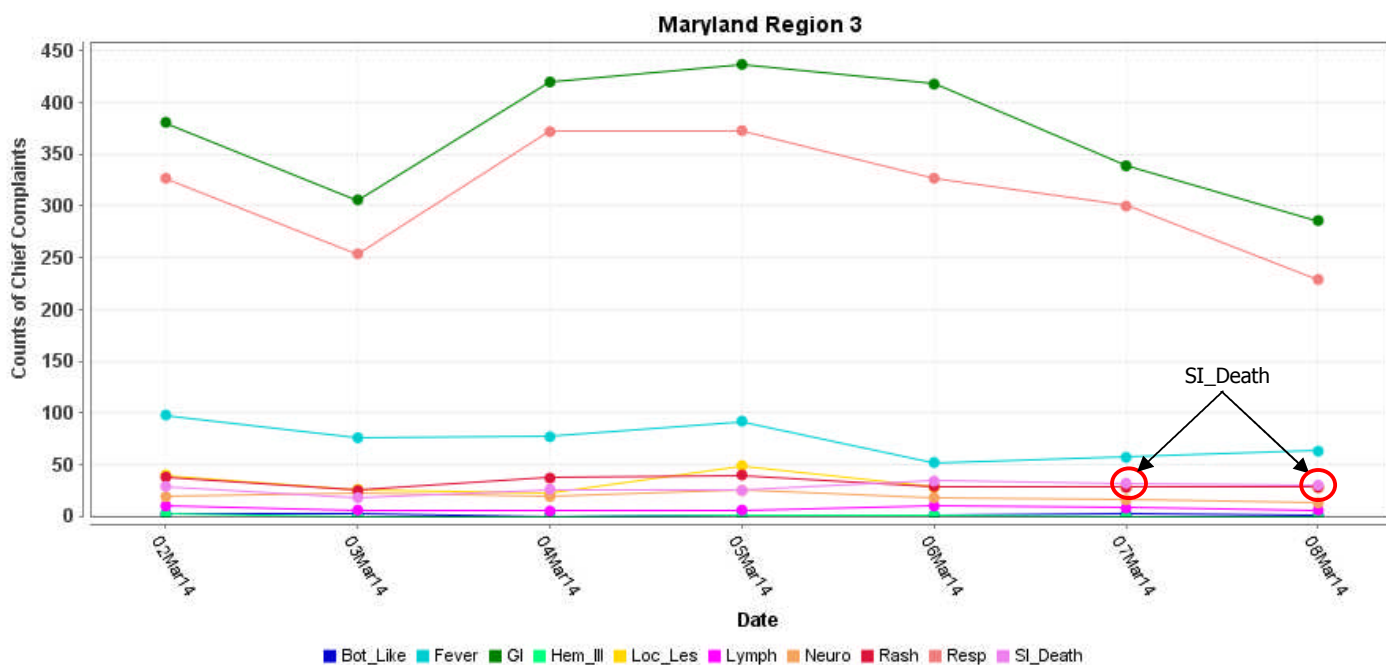
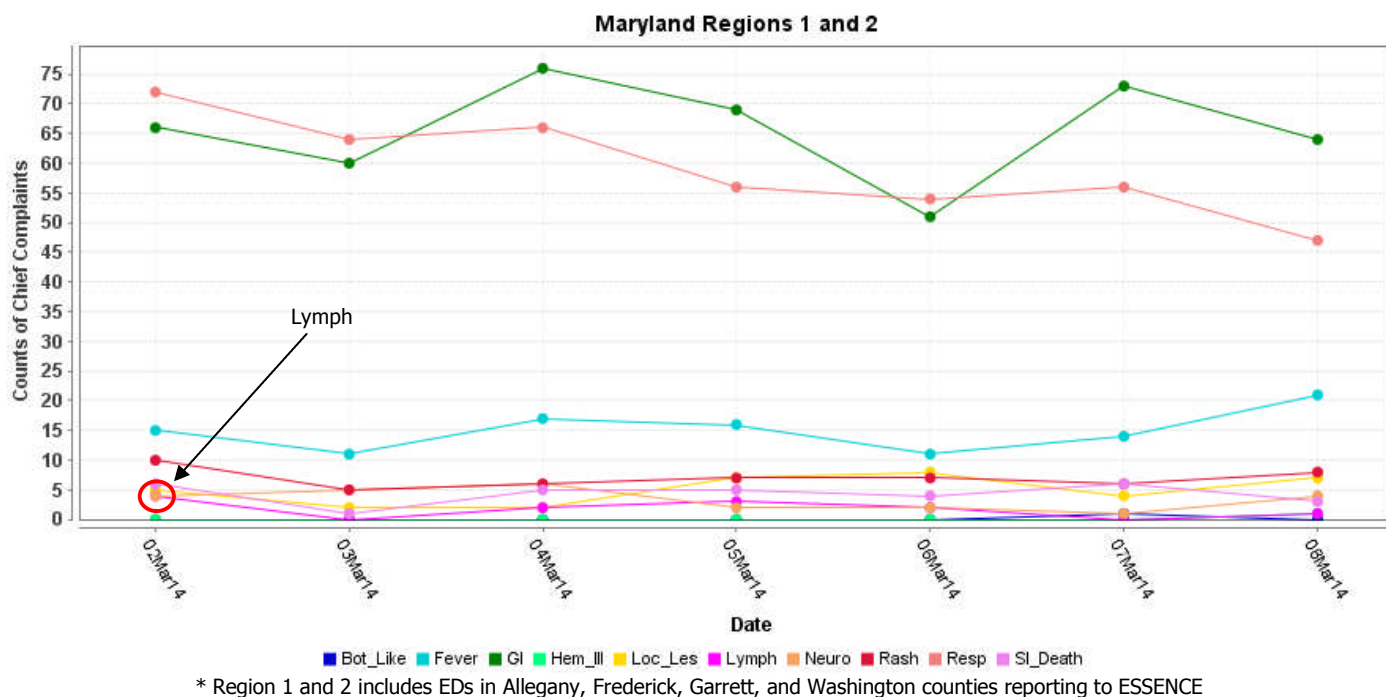
#### **ESSENCE (Electronic Surveillance System for the Early Notification of Community-based Epidemics):**

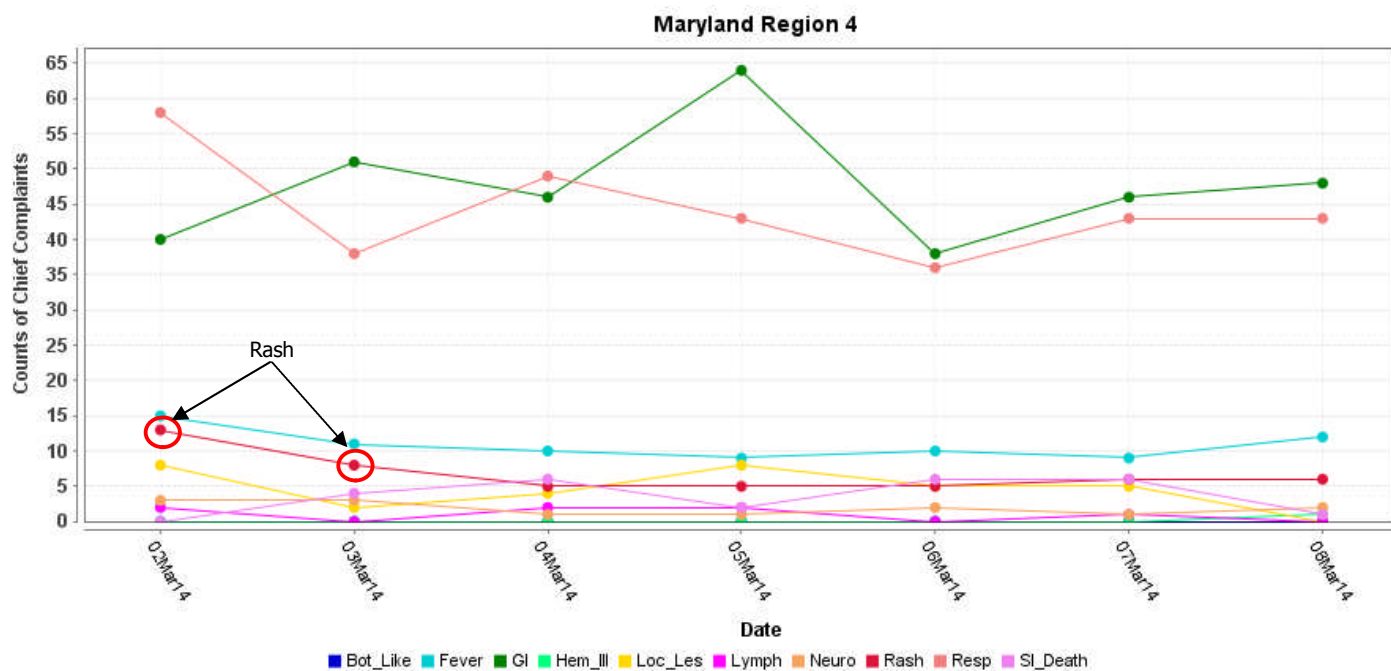
Graphical representation is provided for all syndromes, excluding the "Other" category, all age groups, and red alerts are circled. Red alerts are generated when observed count for a syndrome exceeds the 99% confidence interval. Note: ESSENCE – ANCR uses syndrome categories consistent with CDC definitions.

Overall, no suspicious patterns of illness were identified. Track backs to the health care facilities yielded no suspicious patterns of illness.

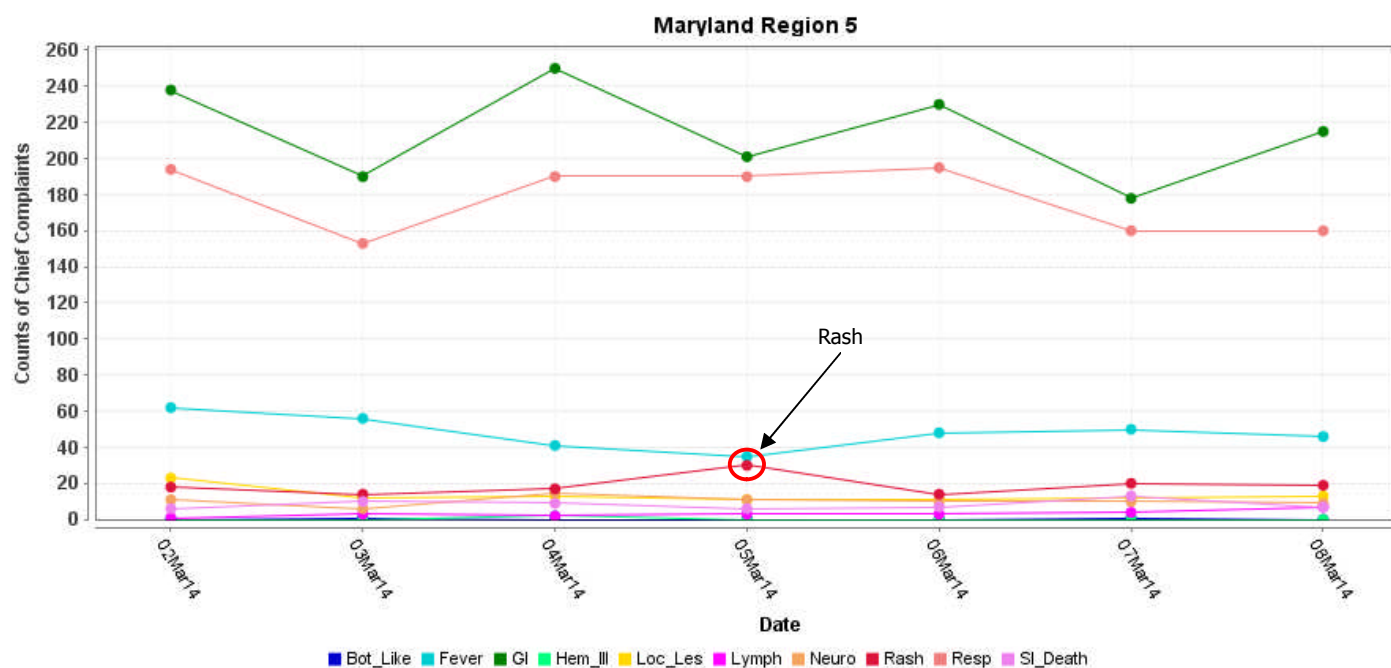


**MARYLAND ESSENCE:**





\* Region 4 includes EDs in Cecil, Dorchester, Kent, Somerset, Talbot, Wicomico, and Worcester counties reporting to ESSENCE

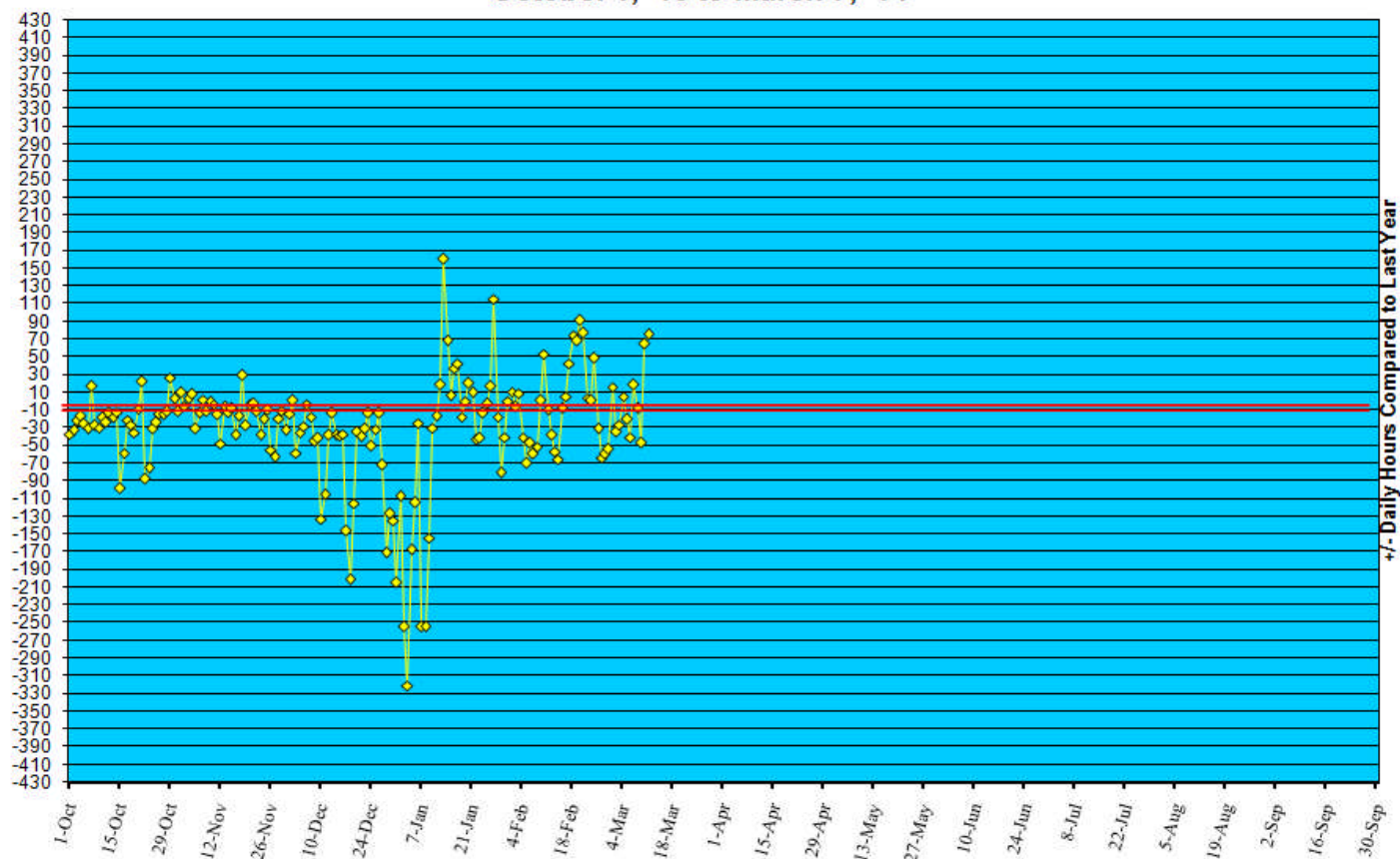


\* Region 5 includes EDs in Calvert, Charles, Montgomery, Prince George's, and St. Mary's counties reporting to ESSENCE

## **REVIEW OF EMERGENCY DEPARTMENT UTILIZATION**

**YELLOW ALERT TIMES (ED DIVERSION):** The reporting period begins 10/01/13.

### **Statewide Yellow Alert Comparison Daily Historical Deviations October 1, '13 to March 7, '14**



## **REVIEW OF MORTALITY REPORTS**

**Office of the Chief Medical Examiner:** OCME reports no suspicious deaths related to an emerging public health threat for the week.

## **MARYLAND TOXIDROMIC SURVEILLANCE**

**Poison Control Surveillance Monthly Update:** Investigations of the outliers and alerts observed by the Maryland Poison Center and National Capital Poison Center in February 2014 did not identify any cases of possible public health threats.

## REVIEW OF MARYLAND DISEASE SURVEILLANCE FINDINGS

### COMMUNICABLE DISEASE SURVEILLANCE CASE REPORTS (confirmed, probable and suspect):

<b>Meningitis:</b>	<b>Aseptic</b>	<b>Meningococcal</b>
New cases (March 2 - March 8, 2014):	14	0
Prior week (February 23 - March 1, 2014):	7	0
Week#10, 2013 (March 3 - March 9, 2014):	7	0

### 9 outbreaks were reported to DHMH during MMWR Week 10 (March 2 - 8, 2014)

#### 7 Gastroenteritis Outbreaks

4 outbreaks of GASTROENTERITIS in Nursing Homes  
2 outbreaks of GASTROENTERITIS in an Assisted Living Facility  
1 outbreak of GASTROENTERITIS in a Hospital

#### 1 Foodborne Outbreak

1 outbreak of GASTROENTERITIS/FOODBORNE associated with a Private Home

#### 1 Respiratory Illness Outbreak

1 outbreak of INFLUENZA/PNEUMONIA in an Assisted Living Facility

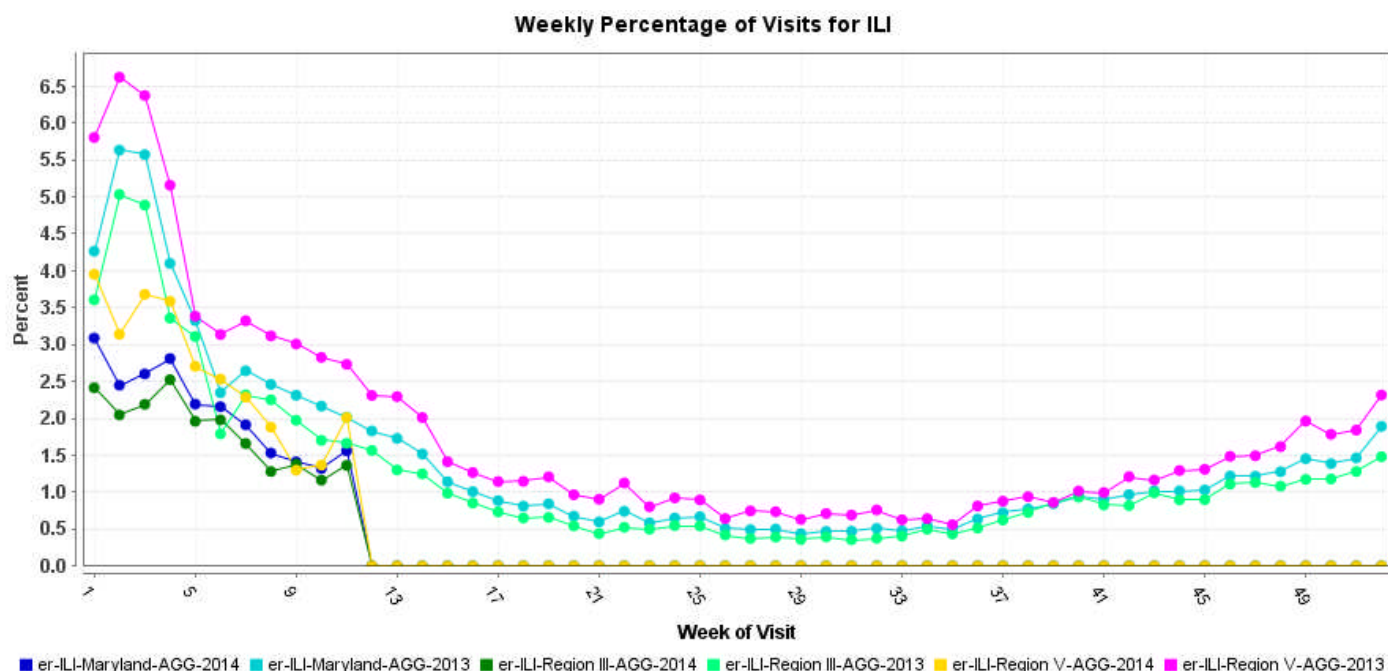
## MARYLAND SEASONAL FLU STATUS

Seasonal Influenza reporting occurs October through May. Seasonal influenza activity for Week 10 was: Local with Minimal Intensity.

## SYNDROMIC SURVEILLANCE FOR INFLUENZA-LIKE ILLNESS

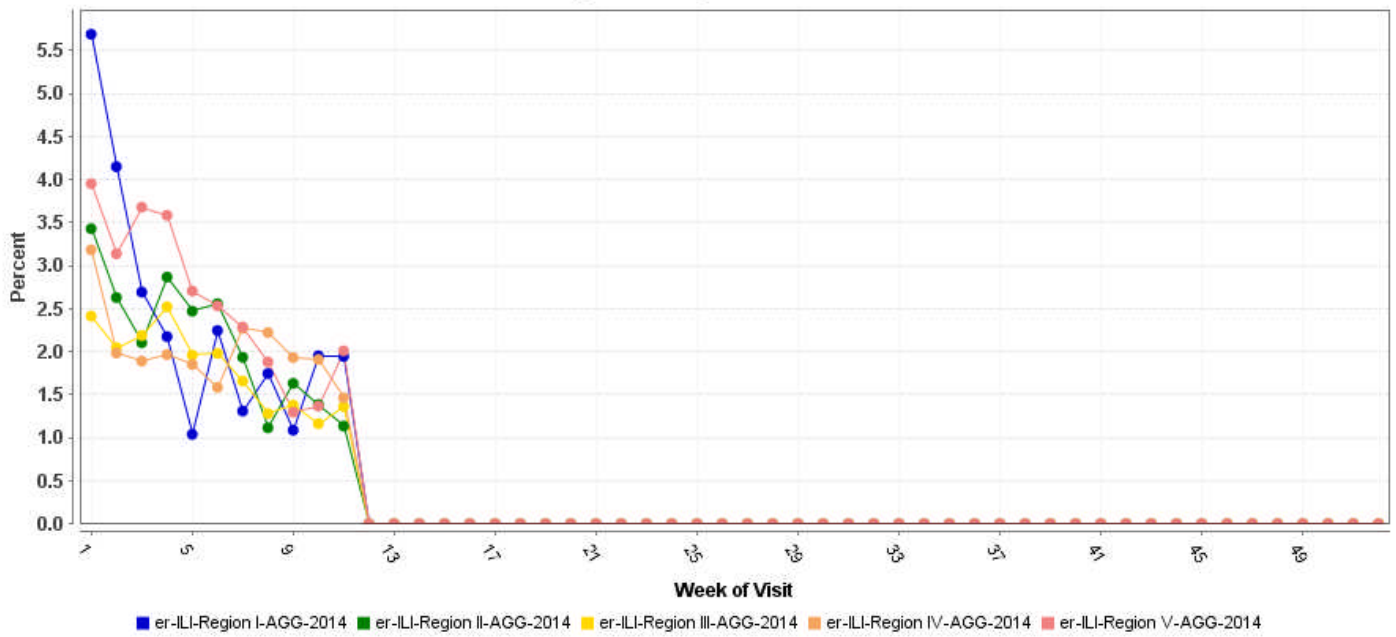
Graphs show the percentage of total weekly Emergency Department patient chief complaints that have one or more ICD9 codes representing provider diagnoses of influenza-like illness. These graphs do not represent confirmed influenza.

Graphs show proportion of total weekly cases seen in a particular syndrome/subsyndrome over the total number of cases seen. Weeks run Sunday through Saturday and the last week shown may be artificially high or low depending on how much data is available for the week.



\* Includes 2013 and 2014 Maryland ED visits for ILI in Metro Baltimore (Region 3), Maryland NCR (Region 5), and Maryland Total

**Weekly Percentage of Visits for ILI**

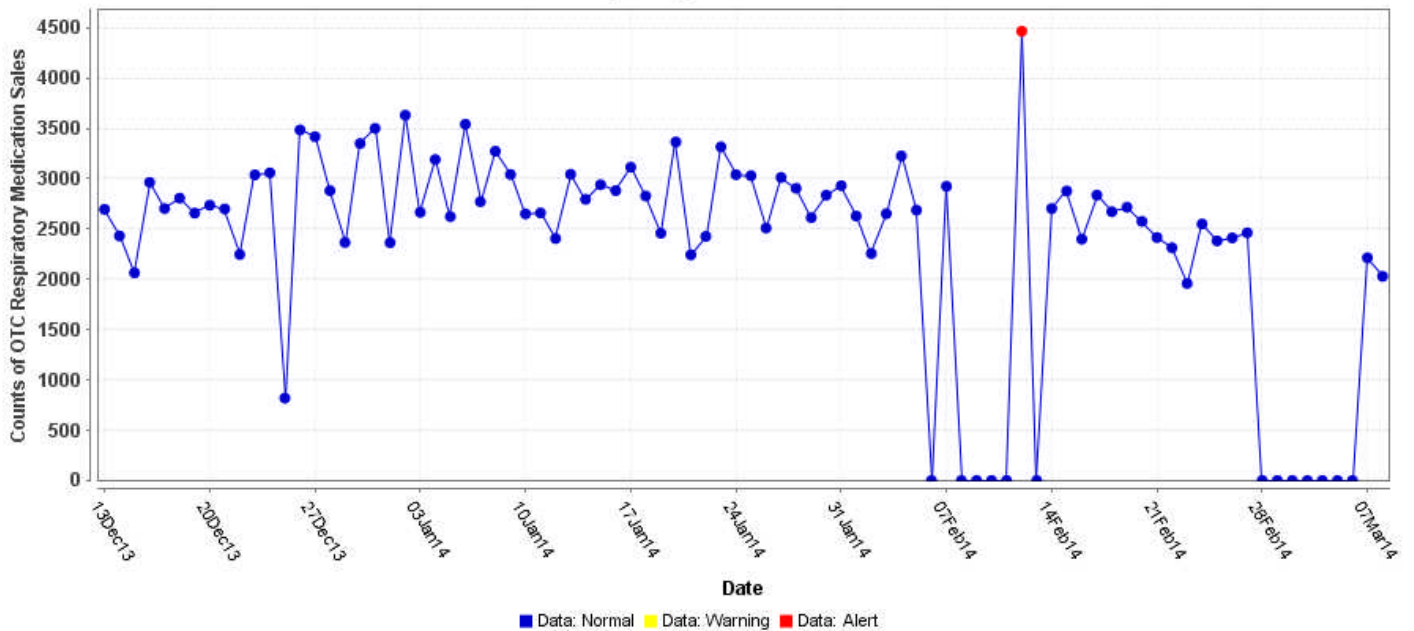


\*Includes 2014 Maryland ED visits for ILI in Region 1, 2, 3, 4, and 5

#### OVER-THE-COUNTER (OTC) SALES FOR RESPIRATORY MEDICATIONS:

Graph shows the daily number of over-the-counter respiratory medication sales in Maryland at a large pharmacy chain.

**OTC Respiratory Medication Sales**



## **PANDEMIC INFLUENZA UPDATE / AVIAN INFLUENZA-RELATED REPORTS**

**WHO update:** The current WHO phase of pandemic alert for avian influenza is ALERT. Currently, the avian influenza H5N1 virus continues to circulate in poultry in some countries, especially in Asia and northeast Africa. This virus continues to cause sporadic human infections with some instances of limited human-to-human transmission among very close contacts. There has been no sustained human-to-human or community-level transmission identified thus far.

Influenza A (H7N9) is one of a subgroup of influenza viruses that normally circulate among birds. Until recently, this virus had not been seen in people. However, human infections have now been detected. As yet, there is limited information about the scope of the disease the virus causes and about the source of exposure. The disease is of concern because most patients have been severely ill. There is no indication thus far that it can be transmitted between people, but both animal-to-human and human-to-human routes of transmission are being actively investigated.

**Alert phase:** This is the phase when influenza caused by a new subtype has been identified in humans. Increased vigilance and careful risk assessment, at local, national and global levels, are characteristic of this phase. If the risk assessments indicate that the new virus is not developing into a pandemic strain, a de-escalation of activities towards those in the interpandemic phase may occur. As of January 24, 2014, the WHO-confirmed global total of human cases of H5N1 avian influenza virus infection stands at 650, of which 386 have been fatal. Thus, the case fatality rate for human H5N1 is approximately 59%.

**AVIAN INFLUENZA (H7N9):** On [4 Mar 2014], the National Health and Family Planning Commission (NHFPC) of China notified WHO of an additional laboratory-confirmed case of human infection with avian influenza A(H7N9) virus. The patient is a 59 year-old man from Zhuhai City, Guangdong Province. He became ill on [26 Feb 2014], was admitted to a hospital on [1 Mar 2014] and died on [2 Mar 2014]. The patient has a history of exposure to live poultry.

The Chinese Government has taken the following surveillance and control measures:

- strengthen surveillance and situation analysis;
- reinforce case management and treatment; and
- conduct risk communication with the public and release information;

The overall risk assessment has not changed. The previous report of avian influenza A(H7N9) virus detection in live poultry exported from mainland China to Hong Kong SAR shows the potential for the virus to spread through movement of live poultry, at this time there is no indication that international spread of avian influenza A(H7N9) has occurred. However as the virus infection does not cause signs of disease in poultry, continued surveillance is needed. Further sporadic human cases of avian influenza A(H7N9) infection are expected in affected and possibly neighboring areas. Should human cases from affected areas travel internationally, their infection may be detected in another country during or after arrival. If this were to occur, community level spread is unlikely as the virus does not have the ability to transmit easily among humans. Until the virus adapts itself for efficient human-to-human transmission, the risk of ongoing international spread of H7N9 virus by travelers is low. WHO advises that travelers to countries with known outbreaks of avian influenza should avoid poultry farms, or contact with animals in live bird markets, or entering areas where poultry may be slaughtered, or contact with any surfaces that appear to be contaminated with feces from poultry or other animals. Travelers should also wash their hands often with soap and water. Travelers should follow good food safety and good food hygiene practices. WHO does not advise special screening at points of entry with regard to this event, nor does it currently recommend any travel or trade restrictions. As always, a diagnosis of infection with an avian influenza virus should be considered in individuals who develop severe acute respiratory symptoms while travelling or soon after returning from an area where avian influenza is a concern. WHO encourages countries to continue strengthening influenza surveillance, including surveillance for severe acute respiratory infections (SARI) and to carefully review any unusual patterns, in order to ensure reporting of human infections under the IHR (2005), and continue national health preparedness actions.

**AVIAN INFLUENZA (H5N1):** A 3-year-old boy from capital Phnom Penh's Por Senchey district has died of H5N1 human avian influenza earlier this month [March 2014], said a joint statement from the World Health Organization (WHO) and the Cambodian Health Ministry Friday [7 Mar 2014]. "The boy died on [2 Mar 2014] after being admitted to the National Pediatric Hospital for 3 days," the statement said. The boy had onset symptoms of fever, cough, running nose and vomiting on [22 Feb 2014] and his parents sent him to the National Pediatric Hospital on [28 Feb 2014] after his condition worsened. The boy became the 6th person infected with the virus in 2014. The statement said in mid-February [2014], over 90 percent of the chickens and small number of ducks suddenly died in the boy's village, and the boy often went to the house of a neighbor whose poultry died. Bird flu remains a serious threat to the health of all Cambodians, and children seem to be the most vulnerable, Health Minister Mam Bunheng said. "I urge parents and guardians to keep children away from sick or dead poultry and make sure children wash their hands with soap and water after any contact with poultry," he said. H5N1 influenza is a flu that normally spreads between sick poultry, but it can sometimes spread from poultry to human beings, according to the WHO. The virus was 1st identified in Cambodia 10 years ago. To date [7 Mar 2014], the country has reported 53 human cases of the virus, killing 35 people, the statement said.

## **NATIONAL DISEASE REPORTS\***

**SALMONELLOSIS (USA):** 5 March 2014, This outbreak investigation continues. Previously, the outbreak appeared to be over, but recent findings indicate otherwise. The number of reported infections from all 7 outbreak strains of *Salmonella Heidelberg* returned to baseline levels in January 2014 and the outbreak appeared to be over, as noted in the previous update on 16 Jan 2014. However, the investigation continued and ongoing surveillance in February 2014 identified that infections from 2 of the previously rare outbreak strains have again exceeded the number of infections expected to be reported to PulseNet during this time of year. As of 28 Feb 2014, a total of 481 individuals infected with the outbreak strains of *S. Heidelberg* have been reported from 25 states and Puerto Rico since 1 Mar 2013. Most of the ill persons (76 percent) have been reported from California. Since the last update on 16 Jan 2014, a total of 51 new ill persons have been reported from 5 states: Arizona (3), California (44), Hawaii (1), Tennessee (1), and Utah (2). CDC and state and local public health partners are focusing the investigation on interviewing ill persons about foods eaten and other exposures before becoming ill, continuing laboratory surveillance through PulseNet to identify additional ill persons who have infections with outbreak-associated strains, and testing recent outbreak strains for antibiotic resistance. Information about illnesses is available from 472 persons. The dates the illnesses began range



from 1 Mar 2013 to 11 Feb 2014. Ill persons range in age from less than 1 year to 93 years, with a median age of 18 years. 51 percent of ill persons are male. Among 394 persons with available information, 151 (38 percent) reported being hospitalized. 13 percent of ill persons have developed blood infections as a result of their illness. Typically, approximately 5 percent of persons ill with Salmonella infections develop blood infections. No deaths have been reported. Illnesses that began after 29 Jan 2014, might not be reported yet due to the time it takes between when a person becomes ill and when the illness is reported. This takes an average of 2 to 4 weeks. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

## **INTERNATIONAL DISEASE REPORTS\***

**BRUCELLOSIS (CYPRUS):** 4 March 2014, An outbreak of brucellosis amongst populations of livestock all over [TRNC (self-declared Turkish Republic of Northern Cyprus)] is now rapidly developing, because there is no money in the "budget" for fighting against it, reports Turkish Cypriot media. Brucellosis is a highly contagious zoonosis caused by ingestion of unsterilized milk or meat from infected animals or close contact with their secretions. Transmission from human to human is rare but possible. The chairman of the union of livestock producers, Mustafa Naimoglu, confirmed that the brucellosis microbe has been discovered at 60 farms and criticized the authorities for not launching a fight against the disease. He said that blood should have been taken from the animals for analysis in order to establish which of them are contaminated. In statements to Kibris, the official responsible for agriculture in TRNC, Onder Sennaroglu said that they have taken money from UNOPS to deal with the issue, but they could not eliminate brucellosis. He noted that he knows that money should not be an excuse, but the cost of this issue is very high. "I have to say that resources are needed, and we have no resources at the moment," he admitted, adding that they have applied to the EU for money. In most countries, any animal found to be infected with brucellosis is immediately killed and properly disposed of. (Brucellosis is listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**SALMONELLOSIS (AUSTRALIA):** 3 March 2014, Victorians have been warned not to consume a brand of raw eggs after recent cases of salmonellosis in restaurants that were linked to an egg farm. The Green Eggs company, which is based near Ararat, in western Victoria, has been named as the probable cause of the salmonellosis outbreak. New Health Department and biosecurity restrictions have been placed on the farm as investigations continue. More than 200 people were affected after eating the eggs at restaurants in Torquay and St Kilda. Egg suppliers have been warned to destroy all eggs sold under the brand, or ensure that they are cooked properly before consumption. Victoria's chief health officer, Dr Rosemary Lester, said people who may have bought Green Eggs products should ensure that the eggs are cooked thoroughly. She says they should not be eaten with a soft yolk. Dr Lester said it would be a few more days until the department could be "100 percent" certain that the Green Eggs company had indeed been at fault, though initial investigations certainly implicated the farm. (Food Safety Threats are listed in Category B on the CDC List of Critical Biological Agents) \*Non-suspect case

**ANTHRAX (KENYA):** 24 February 2014, Three people are feared dead in Musoli, Kakamega county after they reportedly feasted on infected meat. The cow is believed to have been infected with the deadly anthrax. Reports from the village indicate the 3 men decided to skin the dead animal, oblivious of the danger it posed. One of them succumbed to death soon after skinning the animal and eating part of its meat. Those [others] who ate part of the meat are also in serious condition, with some reportedly having developed swollen hands and scars on their bodies. Public Health Officer Josephat Matikho was at the scene in the morning inspecting the carcass to ascertain the disease that killed the cow. Anthrax, the disease suspected to have led to the deaths of the 3 young men, is an acute disease caused by the bacterium *Bacillus anthracis*. Most forms of the disease are lethal, and it affects both humans and animals. When spores are inhaled, ingested, or come into contact with a skin lesion on a host, they may become reactivated and multiply rapidly. (Anthrax is listed in Category A on the CDC List of Critical Biological Agents) \*Non-suspect case

National and International Disease Reports are retrieved from <http://www.promedmail.org/>.

## **OTHER RESOURCES AND ARTICLES OF INTEREST**

More information concerning Public Health and Emergency Preparedness can be found at the Office of Preparedness and Response website: <http://preparedness.dhmm.maryland.gov/> or follow us on Facebook at [www.facebook.com/MarylandOPR](http://www.facebook.com/MarylandOPR).

Maryland's Resident Influenza Tracking System: <http://dhmm.maryland.gov/flusurvey>

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**NOTE:** This weekly review is a compilation of data from various surveillance systems, interpreted with a focus on a potential BT event. It is not meant to be inclusive of all epidemiology data available, nor is it meant to imply that every activity reported is a definitive BT event. International reports of outbreaks due to organisms on the CDC Critical Biological Agent list will also be reported. While not "secure", please handle this information in a professional manner. Please feel free to distribute within your organization, as you feel appropriate, to other professional staff involved in emergency preparedness and infection control.

For questions about the content of this review or if you have received this and do not wish to receive these weekly notices, please e-mail us. If you have information that is pertinent to this notification process, please send it to us to be included in the routine report.

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## Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents

**Table: Text-based Syndrome Case Definitions and Associated Category A Conditions**

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Botulism-like	ACUTE condition that may represent exposure to botulinum toxin ACUTE paralytic conditions consistent with botulism: cranial nerve VI (lateral rectus) palsy, ptosis, dilated pupils, decreased gag reflex, media rectus palsy. ACUTE descending motor paralysis (including muscles of respiration) ACUTE symptoms consistent with botulism: diplopia, dry mouth, dysphagia, difficulty focusing to a near point.	Botulism
Hemorrhagic Illness	SPECIFIC diagnosis of any virus that causes viral hemorrhagic fever (VHF): yellow fever, dengue, Rift Valley fever, Crimean-Congo HF, Kyasanur Forest disease, Omsk HF, Hantaan, Junin, Machupo, Lassa, Marburg, Ebola ACUTE condition with multiple organ involvement that may be consistent with exposure to any virus that causes VHF ACUTE blood abnormalities consistent with VHF: leukopenia, neutropenia, thrombocytopenia, decreased clotting factors, albuminuria	VHF
Lymphadenitis	ACUTE regional lymph node swelling and/ or infection (painful bubo- particularly in groin, axilla or neck)	Plague (Bubonic)
Localized Cutaneous Lesion	SPECIFIC diagnosis of localized cutaneous lesion/ ulcer consistent with cutaneous anthrax or tularemia ACUTE localized edema and/ or cutaneous lesion/ vesicle, ulcer, eschar that may be consistent with cutaneous anthrax or tularemia INCLUDES insect bites EXCLUDES any lesion disseminated over the body or generalized rash EXCLUDES diabetic ulcer and ulcer associated with peripheral vascular disease	Anthrax (cutaneous) Tularemia
Gastrointestinal	ACUTE infection of the upper and/ or lower gastrointestinal (GI) tract SPECIFIC diagnosis of acute GI distress such as Salmonella gastroenteritis ACUTE non-specific symptoms of GI distress such as nausea, vomiting, or diarrhea EXCLUDES any chronic conditions such as inflammatory bowel syndrome	Anthrax (gastrointestinal)

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents**  
(continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Respiratory	<p>ACUTE infection of the upper and/ or lower respiratory tract (from the oropharynx to the lungs, includes otitis media)</p> <p>SPECIFIC diagnosis of acute respiratory tract infection (RTI) such as pneumonia due to parainfluenza virus</p> <p>ACUTE non-specific diagnosis of RTI such as sinusitis, pharyngitis, laryngitis</p> <p>ACUTE non-specific symptoms of RTI such as cough, stridor, shortness of breath, throat pain</p> <p>EXCLUDES chronic conditions such as chronic bronchitis, asthma without acute exacerbation, chronic sinusitis, allergic conditions (Note: INCLUDE <i>acute exacerbation</i> of chronic illnesses.)</p>	<p>Anthrax (inhalational)</p> <p>Tularemia</p> <p>Plague (pneumonic)</p>
Neurological	<p>ACUTE neurological infection of the central nervous system (CNS)</p> <p>SPECIFIC diagnosis of acute CNS infection such as pneumococcal meningitis, viral encephalitis</p> <p>ACUTE non-specific diagnosis of CNS infection such as meningitis not otherwise specified (NOS), encephalitis NOS, encephalopathy NOS</p> <p>ACUTE non-specific symptoms of CNS infection such as meningismus, delirium</p> <p>EXCLUDES any chronic, hereditary or degenerative conditions of the CNS such as obstructive hydrocephalus, Parkinson's, Alzheimer's</p>	Not applicable
Rash	<p>ACUTE condition that may present as consistent with smallpox (macules, papules, vesicles predominantly of face/arms/legs)</p> <p>SPECIFIC diagnosis of acute rash such as chicken pox in person &gt; XX years of age (base age cut-off on data interpretation) or smallpox</p> <p>ACUTE non-specific diagnosis of rash compatible with infectious disease, such as viral exanthem</p> <p>EXCLUDES allergic or inflammatory skin conditions such as contact or seborrheic dermatitis, rosacea</p> <p>EXCLUDES rash NOS, rash due to poison ivy, sunburn, and eczema</p>	Smallpox
Specific Infection	<p>ACUTE infection of known cause not covered in other syndrome groups, usually has more generalized symptoms (i.e., not just respiratory or gastrointestinal)</p> <p>INCLUDES septicemia from known bacteria</p> <p>INCLUDES other febrile illnesses such as scarlet fever</p>	Not applicable

**Syndrome Definitions for Diseases Associated with Critical Bioterrorism-associated Agents** (continued from previous page)

<b>Syndrome</b>	<b>Definition</b>	<b>Category A Condition</b>
Fever	<p>ACUTE potentially febrile illness of origin not specified</p> <p>INCLUDES fever and septicemia not otherwise specified</p> <p>INCLUDES unspecified viral illness even though unknown if fever is present</p> <p>EXCLUDE entry in this syndrome category if more specific diagnostic code is present allowing same patient visit to be categorized as respiratory, neurological or gastrointestinal illness syndrome</p>	Not applicable
Severe Illness or Death potentially due to infectious disease	<p>ACUTE onset of shock or coma from potentially infectious causes</p> <p>EXCLUDES shock from trauma</p> <p>INCLUDES SUDDEN death, death in emergency room, intrauterine deaths, fetal death, spontaneous abortion, and still births</p> <p>EXCLUDES induced fetal abortions, deaths of unknown cause, and unattended deaths</p>	Not applicable

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**DEPARTMENT OF HEALTH AND HUMAN SERVICES  
CENTERS FOR DISEASE CONTROL AND PREVENTION**

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